3.7 LAND AND SHORELINE USE

3.7.1 Applicable Sections in FERC Documents

Please refer to Section 3.9 in the FERC Final EIS and Resource Report 7, Soils, and Resource Report 8, Land Use, Recreation, and Visual Resources, in Exhibit F-1 of GSX-US's original application to FERC.

3.7.2 Issue ~~1~~26: Consistency with Plans and Policies

Issue Summary

Description of Problem

The FERC Final EIS does not include a summary of existing land use plans, shoreline plans, or zoning regulations applicable to the proposal, nor does it include a discussion of whether the proposal is consistent or inconsistent with these plans and regulations.

Ecology Requirement

Include an analysis of the proposal's consistency with adopted land use and shoreline plans and regulations in the environmental review.

Affected Environment

No additional analysis required.

Impacts

Proposed Action

No additional analysis required. Refer to discussion of consistency with land use plans and policies below.

Terasen Gas Alternative

Approximately 30 acres would be converted for use for the three compressor stations. Each station would require approximately 10 acres, with 7 acres requiring clearing. Most of the pipeline looping on 45.3 miles of existing Terasen Gas pipeline would be constructed within existing pipeline right-of-way. The LNG facility would require an operational area of 10 acres, with a minimum 300-acre protective buffer surrounding the site.

No Action Alternative

Impacts of the proposed project would not occur.

Consistency with Plans and Policies

The purpose of this section is to evaluate the consistency of the GSX-US project with adopted land use plans, policies, and regulations. A summary of the key elements of each plan, policy, or regulation is provided and followed by an analysis of consistency with the proposal. No equivalent consistency analysis was conducted for the GSX-Canada portion of the project.

State of Washington

Clean Water Act Implementation

Water quality regulations are mandated by the federal Clean Water ~~Act (Water~~Act. RCW 90.48, the Water Pollution Control ~~Act). RCW 90.48 is~~Act, is the primary water pollution law for the state of Washington. Under state statute, discharge of pollutants into waters of the state is prohibited unless authorized. WAC 173-201A mandates water quality standards for surface waters. Ecology issues a Section 401 certificate of water quality compliance for each Clean Water Act Section 404 permit. Ecology also has the authority to issue administrative orders for projects not requiring 404 permits. Ecology administers requirements under Clean Water Act Section 402 through its National Pollutant Discharge Elimination System (NPDES) individual and general permits, including a general construction stormwater permit.

Coastal Zone Management Act

The Coastal Zone Management (CZM) Act of 1972 was enacted to encourage advancement of national coastal management objectives and help states develop and implement management programs. Washington's CZM Program has been approved by the National Oceanic and Atmospheric Administration and is administered by Ecology.

When applying for federal permits, such as a U.S. Coast Guard or U.S. Army Corps of Engineers Section 401 and 404 permit, for a project in one of the 15 coastal counties, project applicants must certify that the requirements of the state's CZM Program have been met (Shoreline Management Act, RCW 90.58). For a proposal to be consistent with the CZM Program, it must meet the requirements of SEPA, the Shoreline Management Act, federal and state clean water acts, and federal and state clean air acts. Ecology reviews proposed projects for consistency with the above laws. The CZM Certification of Consistency with Washington's Coastal Zone Management Program for Federally Licensed or Permitted Activities is a checklist that provides the necessary information to assure federal consistency.

For purposes of review, Ecology normally uses the Shoreline Management Act (SMA) statute, Chapter 90.58 RCW, its implementing regulations (WAC), and the local jurisdiction's shoreline master programs (in this case, San Juan and Whatcom counties). However, in the case of the Whatcom County Shoreline Management Program Chapter 23.100.210, the Cherry Point Management Unit (CPMU) has not been accepted by the federal government as part of the State's Coastal Zone Management Act (CZMA) and, therefore, may not be used to determine CZMA consistency. However, Chapter 23.100.210 (the CPMU) was adopted by the State of Washington as part of the state master program in 1987. Therefore, for the purpose of

determining CZMA consistency, Whatcom County's Conservancy and Aquatic shoreline designations that pre-dated the CPMU and are part of the CZMA must be used. Excerpts of the applicable provisions of the Whatcom County Shoreline Master Program (Title 23 of the Whatcom County Code) are included below.

23.30.44 CONSERVANCY SHORELINE AREA

(a) The Conservancy Shoreline Area is defined as:

1. A shoreline area containing natural resources which can be used/managed on a multiple use basis without extensive alteration of topography or banks; including but not limited to forest, agricultural and mineral lands, outdoor recreation sites, fish and wildlife habitat, watersheds for public supplies, and areas of outstanding scenic quality; and/or

(b) The purpose of the Conservancy designation is to obtain long term wise use of its natural resources, including multiple use whenever practical, and to prevent forms of development which would be unsafe or incompatible with more appropriate uses. This policy should be furthered by keeping overall intensity of development or use low, and by maintaining most of the area's natural character.

(c) The following are secondary criteria for Conservancy designation:

1. The area contains renewable natural resources or processes which should be managed so that the resource base is maintained, such as on a sustained-yield basis; or

2. The area is more valuable to the region under multi-purpose, sustained yield management of its natural resources than through any form of more intensive or single purpose development; or

(d) The following policies are adopted for Conservancy Areas:

1. Renewable resources should be managed on a sustained yield basis, and vital natural processes should be protected, so that the overall resource base is maintained. Non-renewable resources should only be consumed in a manner compatible with conservation of other resources and other appropriate uses.

2. Multiple uses of the shoreline should be strongly encouraged and maintained if such uses are compatible with each other and conservation of shoreline resources. Dominant, intensive single uses over large areas should be discouraged.

23.30.46 AQUATIC SHORELINE AREA

(a) The Aquatic Shoreline Area is defined as the area waterward of the OHWM of all streams and rivers, all marine water bodies, and all lakes, together with their underlying lands and their water column; including, but not limited to: bays, straits, harbor areas, waterways, coves, estuaries, streamways, tidelands, bedlands, wetlands and shorelands.

(b) The purpose of the Aquatic designation is to:

1. Encourage and protect appropriate multiple uses, or dominant uses in limited areas, in navigable or open waters.

2. Preserve the limited water surfaces, tidelands and shorelands from encroachment; and

3. Preserve and ensure wise use of the area's natural features and resources which are substantially different in character from those of adjoining uplands and backshores.

(c) The following are secondary criteria for Aquatic designation:

1. Marine water areas seaward of the ordinary high water mark including estuarine channels and wetlands;

(d) The following policies are adopted for Aquatic Areas:

1. Development should be sharply limited to those uses which are compatible with conservation of Area resources including water, fish and wildlife, and recreation areas, as well as with other appropriate uses and the area's unique natural character. Development in conflict with these objectives should be directed to an on shore location.

2. Almost all marine, lake, and river surfaces, water column and bedlands are public property and as such their openness and extent must be protected from unnecessary obstruction or encroachment. Offshore development should be limited to those uses which are truly water-surface dependent, or which provide broad and substantial compensating benefits to the community or region.

3. Multiple use of water surfaces and structures in Aquatic Areas must be protected and encouraged whenever compatible with resource conservation and other appropriate uses. The need for a specific shoreline development to be multiple-purpose increases as its impact on the shoreline increases.

4. As with Conservancy, mult-iple use and sustained yield are the two overriding poli-cies for management of Aquatic Areas. Development in substantial conflict with these policies should not be permitted due to the public property nature of this area and its natural features.

23.90.10 GENERAL POLICIES

.11 Water Dependent/Water Related Uses

Preference should first be given to appropriate use and development activities which are water dependent, water related or water enjoyment activities as defined in this Program, and secondly to those activities which do not adversely affect the shoreline environment or other uses and further the goals and objectives of this Program. Activities that are not consistent with this Program should be discouraged or prohibited.

.13 Use Conflicts

Developments should be located, designed, constructed and managed to minimize adverse effects on other appropriate shoreline uses, whether existing or planned, and to provide safe, healthy conditions. Unavoidable impacts or use conflicts should be held to publicly acceptable minimums

by utilizing a variety of mitigation measures such as buffer areas, site design, landscaping and setbacks. Intensive shoreline uses should locate near existing uses of a similar character, or in new locations which are consistent with this Program.

.15 Hazardous, Sensitive or Unsuitable Areas

Natural features or conditions associated with shorelines are often environmentally sensitive or potentially hazardous to development. Such areas and features include natural wetlands, accretion shoreforms, floodways, alluvial fans, steep slopes, unstable soils, ground and surface water, fish and wildlife habitat and shore processes. Many such areas are often unique or scarce, highly productive biologically, visually attractive, valuable for public access, open space or recreation, and in many instances hazardous or otherwise unsuitable for intensive use or development. Such areas should be maintained in a natural condition. In limited instances where alternatives are infeasible, some minimal development activity may be allowed, provided optimum mitigation is achieved. Such development, if properly conducted, should not impair natural features, recreation or aesthetic values or result in hazardous conditions, and should adequately protect resources over the long term.

.16 Site Preparation

Land clearing, grading, filling, and alteration of natural drainage or other features should be limited to the minimum amount necessary to accommodate approved development. Surfaces cleared of vegetation should be immediately revegetated with native or compatible plants. Landscaping projects requiring substantial earth modification and grading should be carefully and professionally designed to prevent maintenance problems or damage to shore features and processes.

.18 Water Quality

Location, construction, operation, and maintenance of all shoreline use and development activities should maintain or enhance the quality of surface and ground water over the long term, and restore water quality if degraded. As a minimum, state water quality and all other applicable standards should be adhered to.

.20 Fish and wildlife

All shoreline use and development activities should be located and operated so as to provide long term protection of fish and wildlife resources, and their various habitats. Maintenance and enhancement of fisheries should be given priority consideration in reviewing shoreline use proposals which might adversely impact fisheries habitat, migratory routes and harvest of significant fish or shellfish species. Alternative locations or designs should be seriously considered for such proposals if such potential adverse impacts are significant. Shorelines having banks, beaches and beds critical to preservation or enhancement of the fisheries resource base should be maintained or restored to a productive natural condition whenever possible.

.21 Views and Aesthetics

Development should not detract from shoreline scenic and aesthetic qualities which are derived from natural or cultural features, such as shoreforms, natural vegetative cover, scenic vistas, diverse landscapes, historic structures, and rural and wilderness-like shores. These and other scarce or valuable features should be conserved or enhanced by development and utilized for

open space, fish and wildlife habitat, public access or recreation purposes. Over water construction should be minimized, site restoration should be required, visual compatibility in design of development with its surroundings should be encouraged and scenic views should not be obstructed. Also, protection of the view of the shoreline from the water surface should be considered.

.22 Public Access

(a) Physical or visual access to shorelines should be required as a condition of significant development activities, when the proposal would either generate a demand for specific forms of such access, and/or would impair existing, legal access facilities and/or rights.

(f) Publicly-owned shorelines should be limited to water-dependent or public recreational uses, otherwise such shorelines should remain protected open space.

.24 Utilities

Intensive developments should only be located in areas where adequate utilities are already developed, or planned officially, or may be provided without significant damage to shore features. Appropriate materials and techniques should be utilized to protect natural features and other users. Exterior finish of structures and materials should be of a non-reflective character compatible with the surrounding area.

23.90.40 GENERAL REGULATIONS

.41 Use Conflicts

Required setback and buffer areas shall be planted with native or locally compatible species or maintained in a natural condition except where foot or bicycle traffic may require surfacing. Such areas may not be used for vehicle parking nor open storage. Width and physical nature of such buffers shall be determined by the County commensurate with the proposed intensity of use and character of the local area and adjacent uses.

.43 Hazardous, Sensitive or Unsuitable Areas

Development shall be located, designed, constructed and maintained to prevent hazardous conditions and to substantially conserve wetlands, fish and wildlife habitat, shore processes and other sensitive natural features which are valuable in the region.

.44 Site Preparation

Land clearing, grading, filling, removal of vegetation and alteration of natural features shall be kept to the minimum that is reasonably necessary to accommodate approved development. Disturbed areas shall be revegetated as soon as possible.

.46 Water Quality

State water quality and all other applicable standards shall be adhered to. Water quality of ground and surface waters shall not be significantly degraded.

.47 Hazardous/Toxic Materials

(a) Release of hazardous, toxic or acid-forming materials which are likely to degrade surface or ground water quality or damage other resources is prohibited. No airborne release of chemicals shall be permitted over shorelines.

(b) Facilities and procedures utilizing advanced available systems and technology for handling, disposal or prompt spill clean-up of oil, fuel and/or hazardous materials shall be required wherever such materials are to be handled in any significant quantity.

.48 Fish and Wildlife

Design, location, construction and operation of all shoreline use and development activities shall not unnecessarily impact fish and wildlife resources and their respective habitats over the short or long term. Development in critical wildlife habitat areas identified by the Department of Wildlife or Fisheries shall not be permitted unless adequate mitigation of impacts can be provided. Development is also subject to the provisions of the Critical Areas Ordinance.

.49 Views and Aesthetics

Development shall be designed, located, constructed and maintained to avoid obstruction of views or other adverse impacts on shore scenery and aesthetic quality. Where such impacts are unavoidable, development may be approved where significant public access areas or facilities are provided or other means of enhancing the public's enjoyment of visual and aesthetic resources in the area are provided.

.50 Public Access

(a) In the review of all shoreline substantial development or conditional use permits, consideration of public access shall be required.

(b) Public access shall generally not be required for the following except as determined on a case-by-case basis in conjunction with the provisions of Chapter 23.90.22 and 23.90.50:

1. Dredging
2. Forest Practices
3. Landfill and Excavation
4. Mining
5. Private Docks
6. Stream Control Works

.56 Conformance to Other Plans, Policies and Regulations

Use and development activities shall conform to all zoning, subdivision, health and other applicable requirements of Whatcom County and other agencies with jurisdiction in shoreline areas. In the case of conflicting requirements, the more restrictive shall apply.

23.90.60 SETBACKS, HEIGHT, AND OPEN SPACE STANDARDS FOR SHORELINE DEVELOPMENT

.61 Shore Setbacks

Table 23.90.60 establishes the minimum required shore setbacks for development, including all structures and substantial alteration of natural topography. Shore setbacks shall be measured from OHWM; PROVIDED that, on natural wetlands, such setback shall be measured from the edge of the wetland, and on erosional or otherwise geologically unstable banks more than ten feet high and sloping at more than 30 (thirty) percent, such setbacks shall be measured from the bank rim or crest of such slope; PROVIDED FURTHER that, no shore setback shall exceed the geographic limit of the Act's jurisdiction.

23.90.60 Table of Setbacks, Height and Open Space

The following table provides the minimum requirements for shore and sideyard setbacks, height limits, and open space. All figures for setbacks and height denote feet. Letters in parentheses are footnotes, which are defined below.

Minimum Requirements for Setbacks, Height Limits, and Open Space

	Urban	Urban Resort	Rural	Conser-vancy	Natural	Aquatic
Roads/Railways						
Shore Setback:						
Local or Minor Access	25	25	50	100	N/A	N/A
Arterial or Collector	100	100	150	200	N/A	N/A
Signs						
** Shore Setback						
Side Setback	5	5	10	15	N/A	N/A
Height Limit (c/d)	10/15	10/15	6/10	6/10	N/A	10
Utilities						
Shore Setback (a/b)	50/100	50/100	75/125	100/150	N/A	N/A
Side Setback	5	5	10	15	N/A	N/A
*Height Limit (c/d)	20/35	20/35	20/20	20/20	N/A	N/A
Open Space %	30	40	50	60	N/A	N/A
All Other Development						
Shore Setback (a/b)	50/100	50/100	75/125	100/150	N/A	N/A
Side Setback	10	10	15	20	N/A	N/A
*Height Limit (c/d)	15/25	15/25	25/30	25/30	N/A	N/A
Open Space %	30	40	50	60	N/A	N/A

a = Applies to shore dependent structures and development
b = Applies to development not requiring a shoreline location

.65 Miscellaneous Provisions

(a) Setbacks, height or open space requirements established in Title 20 or as a condition of permit approval shall apply when more restrictive.

(b) The following development activities are not subject to setbacks:

2. Underground utilities, other than septic systems;

23.100.180 UTILITIES

Utility development in shoreline areas shall be subject to the policies and regulations of this section and Section 23.90.

23.100.180.10 Policies

.11 Planning and Coordination

New utility development should be con-sistent and coordinated with all local government and state planning, including comprehensive plans and single purpose plans. Site planning and rights-of-way for utility development should provide for com-patible multiple uses such as shore access, trails, and recreation or other appropriate use whenever possible; utility right-of-way acquisition should also be coordinated with transportation and recreation planning.

.16 Fuel Pipelines

Oil and gas pipelines have critical location requirements and have potential for ad-verse and dangerous effects from spills or leaks. Such facilities should not be located along shorelines, particularly in hazardous or sensitive areas, and crossings of water bodies should be held to the minimal number possible at locations consistent with this Program.

.20 Hazardous Materials

If utility operations involve materials whose compositions or interactions with other materials are likely to damage public health, environmental quality, or property values, all handling and storage of such materials should be organized and equipped so as to prevent such likely damages.

.21 Buffer

Recognizing the likelihood of use conflicts from and the intensive industrial character of some utility development, adequate buffers or setbacks should be required commensurate with local shoreline use and physical character.

23.100.180.30 Regulations

.31 Shoreline Area Regulations

(c) Rural: Utility development is permitted subject to policies and regulations.

(d) Conservancy: Utility development is permitted subject to policies and regulations; PROVIDED that, sew-age outfalls and treatment plants, overhead communication or power- lines and fuel pipelines are a conditional use. Communication towers are prohibited.

(f) Aquatic: Submarine water and sewer lines, fuel pipelines, and sewer outfalls are permitted as conditional uses; submarine electrical or communications cables, overhead public utility lines if adequately flood proofed, and water intakes are permitted subject to policies and regulations; for purposes of crossing water bodies, overhead transmission or distri-bution lines and on site electrical communication wiring may be permitted within

100 feet of the OHWM and natural wetlands and over bodies of water as a conditional use; all other utility development is prohibited.

.32 General Regulations

(a) Hazardous Areas:

Utility development other than subsurface pipelines or cables is prohibited in flood plains, coastal flood hazard areas, or geologically unstable or unsafe areas; PROVID-ED that, conditional use permits may be granted for limited development in flood plains or coastal flood hazard areas if adequately flood-proofed, flood levels are not signifi-cantly raised, and alternatives are not feasible; PROVIDED FURTHER, that overhead public utility lines and support structures, if adequately flood proofed, may be located in the flood plain without a conditional use permit, subject to all other applic-able regulations.

(c) Fossil Fuels:

Oil and gas pipelines, except local service lines, may be authorized as a conditional use. Developers of pipelines and related appurtenances for gas and oil shall be required to demonstrate adequate provisions for preventing spills or leaks, as well as established procedures for mitigat-ing damages from spills or other malfunctions.

.33 Tabular Regulations: Setbacks, Height Limits and Site Coverage for Utility Development

(a) Minimum required setbacks from shorelines and side property lines and maximum height limits are contained in Section 23.90.60-Setback, Height and Open Space Standards for Shoreline Develop-ment.

23.100.40 DREDGING

Dredging in shoreline areas shall be subject to the policies and regulations of this section and Section 23.90.

23.100.40.10 Policies

.11 Necessity and Purpose

Dredging should be permitted for water-dependent uses of economic importance to the region only when necessary and alternatives are infeasible or less consistent with this Program.

.12 Water Quality and Quantity

Dredging should aim toward maintaining state water quality and all other applicable standards of affected waters and prevent-ing additional flooding or erosion.

.13 Geo-Hydraulics

Potential adverse impacts of dredging should be carefully assessed. Design and operating conditions should be established which will prevent interruption of the shore process corridor or significant harm from erosion or flooding to valuable physical features and properties .

.14 Fish and Wildlife

In reviewing dredging proposals, the County should ensure that maximum feasible conservation of shore-related life forms and their respective habitats is provided. Enhancement of such habitats through dredging or use of dredge spoil should be encouraged whenever consistent with State Wildlife and Fisheries Department policies.

.16 Spoil Disposal

(a) Because of the high probability of water quality and biologic resource problems from disposal, dredge spoils should not be deposited in shallow offshore areas or natural wetlands. Suitable land or open water sites should be selected in cooperation with other public agencies including the County Health Board, Port of Bellingham, adjacent local governments, Lummi Nation, Nooksack Tribe, State Departments of Natural Resources, Fisheries, Ecology, and Wildlife and the Federal Environmental Protection Agency and the Army Corps of Engineers.

(c) Spoil disposal in open navigable waters may be less consistent with this Program than land disposal, and should be permitted only under one or more of the following conditions:

1. Land disposal is infeasible, less consistent with this Program, or prohibited by law.

2. Offshore biologic habitat will be protected, restored, or enhanced.

3. Adverse effects on water quality or biologic resources from contaminated bottom materials will be mitigated.

4. Shifting and dispersal of spoil will be minimal.

5. Water quality will not be adversely affected.

(d) The County should require dredging project sponsors to provide sufficient detailed information on disposal plans so that a rational decision can be made as to the site and means of disposal which will be consistent in the long term with this Program and other public policies and regulations.

(e) Professional chemical, biological, and physical analysis of spoil material should be considered in review of extensive projects or those in sensitive areas.

.17 Sensitive Areas

Dredging should not be permitted where valuable natural wetlands, estuaries, eelgrass beds, accretion shoreforms, or other scarce and valuable natural areas would suffer significant harm. In estuarine branch channels, dredging below low tide level does not increase channel capacity but acts as a sediment trap requiring periodic, long term maintenance dredging and should not be permitted.

.18 General Dredging Considerations

(a) Dredging should utilize techniques that cause minimum dispersal and broadcast of bottom material; sidecast disposal in water bodies should not be permitted; hydraulic dredging is generally preferred over agitation dredging.

(b) Hydraulic modeling studies should be considered in review of large scale, extensive dredging projects, particularly in estuaries in order to identify existing geo-hydraulic patterns and probable effects of dredging.

(c) It must be considered in design review that in the long term, the relatively fixed horizon and profile of the wave-cut terrace underlying loose beach material on ending marine cliff shores cannot feasibly be re-established once cut away.

.19 Timing

All operations should be carefully scheduled and conducted to prevent or minimize adverse impacts upon shoreline features.

.20 Beach Feeding

The use or recycling of dredge spoil for beach feeding, habitat enhancement, berm building, or soil building on agricultural lands is preferable to landfill or open water disposal and should be encouraged if the soil is clearly suitable for such uses.

23.100.40.30 Regulations

.31 Shoreline Area Regulations

(c) Rural: Dredging is permitted as a conditional use subject to policies and regulations.

(d) Conservancy: Dredging is permitted as a conditional use subject to policies and regulations.

(f) Aquatic: Dredging is permitted as a conditional use, except that dredging pursuant to Chapter 23.50.31(b),(d) is permitted subject to policies and regulations;

.32 General Regulations

(a) Necessity and Purpose

Dredging shall be permitted for the following purposes only:

1. Development of approved wet moorages and harbors, ports and shore dependent industries;

2. Restoration or enhancement of hydraulic capacity of streamways, and construction or maintenance of irrigation reservoirs, and drains, canals or ditches for agricultural purposes; Provided, sidecasting of dredged materials to create or enlarge berms or dikes is prohibited unless specifically planned and authorized by a shoreline permit in accordance with Chapter 23.100.170 Stream Control Works;

3. Mitigation of conditions adverse to public safety;

4. Enhancement of water quality or biologic habitats;

5. Enhancement of shore dependent or related recreational opportunities for substantial numbers of people;

6. Minor trenching to allow the installation of necessary underground pipes or cables.

(b) Public Safety and Environmental Protection

1. The County may impose reasonable limitations on dredge or disposal operating periods and hours, and may require provision of buffer strips at land disposal or transfer sites in order to protect the public safety and other shore users' lawful interests from unnecessary adverse impact.

2. All phases of dredging shall be conducted so that state quality standards for affected waters are not lowered on a long term basis. The County may require reasonable pre-cautions, particularly in disposal operations such as dikes (temporary), settling basins, or buffer strips to achieve this objective. Release onto shorelines of hazardous materials is prohibited.

3. Stream, lake or marine banks shall not be lowered if material damage to shoreline resources or other properties will likely result therefrom.

(c) Spoil Disposal

Disposal is prohibited on marine shorelines landward from the line of extreme low tide, on lake shorelines or beds, and in stream-ways; PROVIDED that, dredge spoil may be utilized in approved beach feeding or other shoreline resource enhancement deve-lopment, or in landfills if permitted under applicable regulations.

(d) Landfill

Dredging bottom material from natural water bodies or their adjacent natural wetlands for the purpose of obtaining landfill material is prohibited, except that limited bar scalping of gravel in stream-ways is permitted under Mining policies and regulations (Section 23.100.90).

(e) Sensitive Areas

Dredging is prohibited in estuaries, wetlands adjacent to natural water bodies, alluvial fan hazard areas, in marine accretion shoreforms, or at the base of feeder bluffs except in the following instances, with the approval of the Washington Department of Fisheries and/or Wildlife:

1. Dredging is permitted as a conditional use in wetlands for the purpose of fish and/or wildlife enhancement.

2. Dredging is permitted as a conditional use in alluvial fan hazard areas, such as creek deltas, for the purposes of enhancing fish passage to existing fish hatcheries.

3. Dredging is permitted as a conditional use in alluvial fan hazard areas, such as creek deltas, to allow protection of existing structures, roads and facilities where no feasible alternative exists (Whatcom County 2003).

Shoreline Management Act

The goal of Washington's SMA (RCW 90.58) is "to prevent the inherent harm in an uncoordinated and piecemeal development of the state's shorelines." The act establishes a broad policy of shoreline protection, which includes water quality, flora and fauna, and habitat protection. The SMA uses a combination of policies, comprehensive planning, and ~~zoning~~shoreline environment designations to create a special zoning code overlay for shorelines. Under the SMA, each city and county ~~can adopt a shoreline master program~~must adopt a Shoreline Master Program (SMP) that is based on state guidelines but tailored to the specific geographic, economic, and environmental needs of the community. Master programs provide policies and regulations that address shoreline use and protection as well as a permit system for administering the program.

On May 2, 2001, GSX-US submitted an incomplete and premature request for a Certification of Consistency with the Washington CZM Program to Ecology. As recently revised, GSX-US currently proposes to implement several measures to ensure consistency with the CZM Program as described below.

- The landfall near Cherry Point would be crossed using the HDD construction method. The drill entry point would be located about ~~1,000~~900 feet inward of the top of the coastal bluff and would pass through the ground about 200 feet below the surface, ensuring pipeline protection from bluff erosion. At the beach and nearshore, the pipeline would be approximately 30-50 feet below the surface. The exit point would be about 2,200 feet offshore at approximately -134 feet MLLW, avoiding direct disturbance to the coastal bluff and nearshore environment.
- From the HDD exit point to a water depth of about 240 feet at approximately 5 miles, the pipe would be buried in the seabed at a depth equivalent to the pipe's diameter to protect against significant ecological impacts (e.g., crab movement or substrate alteration).
- Stream reaches designated as ~~shorelines~~"shorelines of the state" under the SMA would be crossed using the HDD construction method.
- Geotechnical investigations have indicated a high probability of success for all HDD crossings.
- ~~SMP policies and regulations of Whatcom and San Juan counties would be followed.~~
- Streams and wetlands would be crossed using FERC procedures (with specified variances discussed in Section 3.4.2.3 of the FERC Final EIS) and enforceable policies of the U.S. Corps of Engineers and Ecology.
- GSX-US would implement the FERC plan (with specified variances discussed in Section 3.2.1 of the FERC Final EIS) to control erosion and sedimentation from construction activities. Additionally, GSX-US would comply with enforceable policies of state and county programs addressing groundwater controls.

- Onshore and offshore Spill Prevention Control and Countermeasures (SPCC) Plans have been prepared to minimize spill potential and consequences of a spill, which are currently under review by Ecology.
- Operation of the proposed Cherry Point compressor station would be in compliance with state air quality requirements.
- Pipeline facilities would be designed and located to minimize impact on shoreline functions, preserve the natural landscape, and minimize conflicts with present and planned land and shoreline uses.
- The proposed pipeline facilities would be located adjacent to existing rights-of-way and utility corridors for about 73% of the onshore length. Just over a quarter of the upland route would require a new utility corridor. All of the marine route requires a new utility corridor.

Cherry Point Aquatic Reserve

The WDNR is responsible for the management of state-owned aquatic land, including the aquatic lands proposed for the GSX-US pipeline right-of-way. On September 25, 2003, the Commissioner of Public Lands recommended the creation of four aquatic reserves in Puget Sound pursuant to WAC 332-30-151. One of the four reserves is the Cherry Point Aquatic Reserve.

The purpose of the Cherry Point Aquatic Reserve is to establish an environmental reserve for conservation to protect the site's essential habitat for chinook salmon and the Cherry Point herring stocks, and to prevent further habitat degradation. The Cherry Point site includes the tidelands and bedlands along the western shore of Whatcom County. The site borders the Strait of Georgia and extends from the southern boundary of Birch Bay State Park around Point Whitehorn to the northern boundary of the Lummi Indian Reservation.

WDNR is currently preparing a management plan and SEPA SEIS for the proposed Cherry Point Aquatic Reserve. Under the management plan as currently proposed, three management areas would be established:

(b) The Aquatic Designation would apply to the area around Point Whitehorn near Birch Bay State Park. Within this area, development would be limited to those uses that are compatible with conservation of area resources, are water dependent, and benefit the community.

(c) The Accretion Shoreform would apply to a small area near the proposed Pacific International Terminal. Within this area, development would be prohibited other than recreational development for public access that is consistent with the aquatic shoreline designation.

(d) The largest designation within the proposed reserve would be the Cherry Point Management Unit. This area would apply to the shorelines zoned for Heavy Impact Industrial uses under the Whatcom County zoning code. The preferred use in this designation would be floating public and private marine cargo transfer terminals. Dredging and filling not associated with construction activities would be prohibited. The GSX-US pipeline would cross under the shoreline within this management unit.

A scoping meeting for the Draft SEIS on the management plan was held on October 23, 2003. WDNR's remaining schedule for meetings on Cherry Point include a public meeting on January 15, 2004 to review the Draft SEIS. A full public hearing on the management plan, Draft SEIS, reserve boundaries, and Public Benefit Analysis will be held on January 26, 2004.

The management plan, along with the SEPA SEIS, is scheduled for completion in April 2004. At that time WDNR will determine if the proposed GSX-US pipeline can or should be sited within the Cherry Point Aquatic Reserve and, if appropriate, the conditions for allowing its use.

Whatcom County

The entire U.S. onshore portion of the proposed project and the majority of the offshore portion are located in Whatcom County. Whatcom County has several plans and/or ordinances in place to guide and direct growth within the county including a Comprehensive Plan, Critical Areas Ordinance, and SMP. The county also developed natural gas and hazardous liquid pipeline siting criteria in October 2001 that can be used to identify utility corridors best suited to these types of pipeline projects.

Comprehensive Plan

The Washington State Legislature adopted growth management legislation in 1990 and 1991 and in most years since then. The 1990 Growth Management Act (GMA), RCW 36.70A.070, sets goals to guide planning in the larger, fastest growing counties and cities within those counties. The Whatcom County Comprehensive Plan was reviewed for consistency with the requirements of the GMA and the 13 stated goals of the GMA's mandatory plan elements.

The Whatcom County Comprehensive Plan is intended to guide growth in unincorporated areas of the county for the next 20 years in coordination with the plans of its incorporated cities. The fundamental purpose of the Comprehensive Plan is "to establish a framework of goals, policies, and action items for the more detailed growth planning and implementation actions which will occur in the near future in designated unincorporated urban growth areas in the county's rural areas" (Whatcom County 1997).

The Comprehensive Plan identifies Urban Growth Areas (UGAs) and contains a future land use map. The majority of the county's growth is expected to be within the UGAs (Whatcom County 1997). Of the UGAs identified in the plan, the GSX-US pipeline route crosses only the Cherry Point Major Port/Industrial UGA. The land within this UGA has been planned and designated by Whatcom County for industrial development and is currently the site of three major industrial facilities including two oil refineries and an aluminum smelter. According to the Whatcom County Comprehensive Plan, the goal of the Cherry Point UGA is to maintain the area as an unincorporated UGA based on its unique location and characteristics and its significant contribution to the overall industrial land supply and Whatcom County's tax base. GSX-US's proposed route would be within the Cherry Point UGA between MPs 29.3 and 33.1. The proposed Cherry Point compressor station would also be located within the Cherry Point UGA. The placement of these facilities within the Cherry Point Major Port/Industrial UGA is consistent with the intended use of this UGA.

Shoreline Management Program

The Whatcom County SMP was originally adopted in May 1976 with subsequent Ecology approval in August 1976 to establish and address the shorelines of the state within Whatcom County. Several amendments have been adopted since 1976. The Whatcom County SMP was developed to fulfill the requirements of the state SMA, Chapter 90.58 RCW. The overall goal of the SMP is to achieve rational, balanced, and responsible use of Whatcom County's shorelines (Whatcom County ~~1998).~~2003).

Shorelines of the State are defined as "the total of all shorelines and Shorelines of State-Wide Significance." Shorelines are defined as "all of the water areas of the State, including reservoirs and their associated wetlands, together with lands underlying them; except: a) shorelines of statewide significance; b) shorelines on segments of streams upstream of a point where the mean annual flow is 20 cubic feet per second or less and the wetlands associated with such upstream segments; and c) shorelines on lakes less than 20 acres in size and wetlands associated with such small lakes" (Whatcom County ~~1998).~~
2003). Whatcom County's shoreline jurisdiction, therefore, includes the shorelines of statewide significance and the shorelines defined above (the larger streams and lakes, their shores, and associated wetlands).

The onshore portion of the GSX-US project would cross four streams with reaches designated as SMA shorelines (Saar Creek, Sumas River, Fishtrap Creek, and Bertrand Creek). The SMP defines these shorelines as "rural." A rural shoreline means "an area developed at a low overall density or used at a low to moderate intensity; including, but not limited to: residences, agriculture, and outdoor recreation developments" (Whatcom County ~~1998).~~2003). Pipeline facilities crossing these four streams including shorelands extending 200 feet either side of the ordinary high water mark (OHWM) would require approval under the SMP. GSX-US proposes to use the HDD or conventional bore construction method to mitigate potential impact on these designated shorelines. The aboveground portion of the pipeline and related facilities are required to meet the setbacks described for the Rural Environment (i.e., 125 feet from the ordinary high water mark).

The entire marine portion of the proposed route in Whatcom County is designated as a shoreline of statewide significance. Shorelines of statewide significance include all marine waters, water columns, and bedlands seaward of extreme low tide (Whatcom County ~~1998).~~2003). Policies for shorelines of statewide significance that are particularly relevant in this instance, in the following descending order of preference include:

- The statewide interest should be recognized and protected over the local interest.
- The natural character should be preserved.
  "(b)Where intensive development already exists, policies and regulations should be carried out which will allow continued or increased use consistent with this Program. Reduction of adverse impacts on shorelines should be encouraged through re-development to standards of this Program. More intensive development for appropriate uses in such areas should be considered a preferable alternative to expansion into low density use areas."

- Uses should result in long-term benefits to the people of the state.
  "(a) Activities which use shore resources on a sustained yield or non-consuming basis and which are compatible with other appropriate uses should be given priority over uses not meeting these criteria.

  (b) The range of options for shoreline use should be preserved to the maximum possible extent for succeeding generations. Development which consumes valuable, scarce or irreplaceable natural resources should not be permitted if alternative sites are available.

  (a) Potential short term economic gains or convenience should be measured against potential long term and/or costly impairment of natural features."

- Resources and ecological systems should be protected.

  "(b)Those limited shorelines containing unique, scarce or sensitive resources should be left in their natural state."

As stated in the Adoption of Policy, Chapter 23.40.10, "conversely, uses which are not generally consistent with these policies should not be permitted on such shorelines."

The first 0.6-mile portion of the offshore route is within a special shoreline environment designation, the Cherry Point Management Unit. The purpose of the Cherry Point Management Unit is to provide a regulatory environment that: (1) recognizes and balances the special port, industrial, and natural resource needs associated with the development of this marine resource along a shoreline of statewide significance, (2) identifies preferred development components of port and shore-dependent industrial activities consistent with the polices of the SMA, and (3) clearly sets forth the standards for such development (Whatcom County ~~1998).~~2003). Three major industrial/port facilities are currently located in the Cherry Point Management Unit and a fourth facility is proposed. These facilities include the BP Cherry Point Refinery/Pier (including a pier extension constructed in 2000 and 2001), Alcoa Intalco Aluminum Works/Pier, TOSCO Ferndale Refinery/Pier, and the proposed Gateway Pacific Terminal. This area overlaps with the Cherry Point State Aquatic Reserve. GSX-US proposes to use the HDD construction method to mitigate potential impact on this area.

The SMP designates the remaining portion of the offshore route in Whatcom County as ~~"aquatic."~~"Aquatic Shoreline Area." Aquatic shorelines are, "the area waterward of the OHWM of all streams, all rivers of statewide significance, all marine water bodies, and all lakes, together with their underlying lands and their water column; including but not limited to bays, straits, harbor areas, waterways, coves, estuaries, streamways, tidelands, bedlands, wetlands, and shorelands" (Whatcom County ~~1998).~~2003). The pipeline in ~~these~~the marine areas would be buried in the seabed at a depth equivalent to the pipe's diameter from the HDD exit hole at about -134 feet of depth ~~in~~to -240 feet MLLW for approximately 5 miles and then laid directly on the bottom to mitigate significant ecological impacts (e.g., crab movement or substrate alteration). The Aquatic Shoreline Area policies and regulations cited above in the section entitled "Coastal Zone Management Act" also apply.

In its request for Certification of Consistency with the Washington State CZM Program and its application for Shoreline Permit to Whatcom County (June 2001, revised ~~Nov.~~November 2001

and January 2002), GSX-US stated that it would comply with the policies and regulations set forth in the Whatcom County SMP.

Critical Areas Ordinance

Whatcom County has identified lands and waters within the county as critical areas to comply with the GMA (Whatcom County 1997). As defined by RCW 36.70A.030(5) and Whatcom County Code 16.16.800(17), critical areas include geologically hazardous areas, alluvial fan hazard areas, frequently flooded areas, critical aquifer recharge areas, wetlands, and fish and wildlife conservation areas. These areas are defined by the Whatcom County Critical Areas Ordinance and described below.

Geologically Hazardous Areas: Geologically hazardous areas include landslide hazard, seismic hazard, and mine areas. The coastal bluff at the Cherry Point landfall exceeds 35% slope, thereby meeting the definition of a landslide hazard area. GSX-US proposes to install the pipeline in this area using the HDD construction method, which would avoid the coastal bluff. The HDD entry point would be about 900 feet east of the top edge of the coastal bluff.

Alluvial Fan Hazard Areas: Alluvial fan hazard areas include those areas on alluvial fans where flooding and/or debris torrents have the potential to damage or harm the health or welfare of the community. They include the area generally corresponding to the path of recent and potential future stream flooding and/or debris torrents as determined by local topography, hydrology, and depositional history on the fan. No active alluvial fans have been identified on the GSX-US route or aboveground facility sites.

Frequently Flooded Areas: Areas included in this category are subject to a 1% recurrence interval of flooding or a 100-year base flood as mapped by the Federal Emergency Management Agency's Flood Insurance Rate Maps as amended for Whatcom County. Such areas are located along major rivers, streams, and coastal areas where the depth, velocity, intensity, and frequency of flooding during major events are of such a magnitude that risk to human life and property improvements may occur. Subsurface pipelines are allowed uses in floodplains that include the Nooksack River, Sumas River, Saar Creek, Fishtrap Creek, and Bertrand Creek.

Critical Aquifer Recharge Areas: This includes areas of high susceptibility to aquifer contamination as follows:

- The project is located on either Natural Resource Conservation Service hydrologic soil group A or B.
- The project is located on either the Sumas outwash geological unit or the Nooksack River floodplain alluvium geological unit.
- More than 50% of the documented well logs within 0.5 mile of the project indicate a static water level of less than 50 feet below the ground surface as indicated by the most recent well log.
- The project is located on a subsurface above the first occurrence of water that consists of highly permeable materials that are unobstructed by poorly permeable strata.

The majority of the proposed GSX-US route is located within critical aquifer recharge areas.

Wetlands: Wetlands are those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and, that under normal circumstances, do support a prevalence of vegetation typically adapted for life in saturated soil conditions.

Non-regulated wetlands as defined by the Whatcom County Critical Areas Ordinance include:

- Areas in which wetlands were created by activity, intentional or unintentional, other than mitigation after July 1, 1990.
- Isolated wetlands less than 1/3 acre in size (all associated wetlands in shoreline jurisdiction are regulated regardless of size).
- Any wetland hydrologically isolated with vegetation dominated by invasive species or pasture grasses, the dominant functions of which are restricted to stormwater storage/flood attenuation, and the functions are no greater than all alternative non-wetlands sites on the parcel of property in question.

All other wetlands are considered regulated wetlands. Wetlands associated with the GSX project are presented in the FERC Final EIS.

Fish and Wildlife Conservation Areas: Fish and Wildlife Habitat Conservation Areas include:

- Areas where listed species have a primary association.
- Habitats and species of local importance.
- Shellfish habitat conservation areas.
- Kelp and eelgrass beds, Pacific herring spawning areas.
- Ponds and wetlands.
- Lakes and marine waterbodies.
- Rivers and streams.
- Natural area preserves.

Two riparian areas, the Nooksack River corridor and the Terrell Creek corridor, were specifically identified as critical areas. The Cherry Point marine nearshore is a critical area due to the presence of eelgrass, kelp, and spawning areas for herring and surf smelt.

Utility Corridor Planning

In October 2001, Whatcom County completed the siting criteria for natural gas and hazardous liquid pipelines indicating a preference for locating these facilities in existing utility corridors. According to Whatcom County, the purpose or function of utility corridors is to provide some level of predictability to both the general public and to the pipeline industry about the current and future routing of pipelines within the county.

Several locational factors are being considered during the development of siting criteria and the location of corridors. Some of these factors include:

- Distance to schools, high occupancy public facilities, high density residential development, medium density residential development, low density residential development, rural designated land, and areas of more intense rural development.
- Location within designated agricultural, forested, or mineral resource lands (as defined by the Comprehensive Plan).
- Average distance to existing residential structures.
- Location within an existing pipeline right-of-way, preferred county transmission corridor, or within a shared corridor.
- Location of sensitive areas defined in the Critical Areas Ordinance (i.e., wetlands, aquifer recharge areas, frequently flooded areas, geologically hazardous areas, and fish and wildlife habitat conservation areas).
- Acres of designated shoreline to be affected.
- Location of cultural/archeological resources.

The onshore pipeline route would be in or adjacent to various existing rights-of-way/corridors for about 73% of the onshore route. The Whatcom County Utilities Planning and Advisory Committee used the GSX onshore pipeline route as a test case for the siting criteria. That review resulted in a favorable conclusion by the Utilities Planning and Advisory Committee for the upland pipeline route.

Whatcom County has recognized that federal regulations and case law on permitting interstate pipeline facilities may preempt state and local governments. This fact was further acknowledged within an internal communication from the County Prosecutor's office to the County Planner's office. GSX proposes to meet with the County Planner's office to discuss and potentially fund opportunities to ensure that local land use requirements are not compromised or violated.

San Juan County

About 3.7 miles of the offshore portion of the GSX-US project is located in San Juan County. San Juan ~~County has a~~County's Comprehensive Plan and Unified Development Code ~~in place to guide and direct growth and development within the county. San Juan County's Shoreline Master Program is incorporated in both the~~contain policies and regulations that are applicable to the pipeline project even though the GSX-US project would not cross any land surface within the county. ~~Comprehensive Plan and the Unified Development Code.~~The applicable policies and regulations are discussed in the following sections.

Comprehensive Plan

As with Whatcom County, San Juan County's Comprehensive Plan was developed in response to the Washington GMA. San Juan County's Comprehensive Plan is "a guide for the physical, economic, and community development of the county for the next twenty years" (San Juan County ~~1998).~~2002). The Comprehensive Plan uses a land classification system to identify different types of land use districts based on the goals and policies of the Comprehensive Plan. Although the GSX-US project would not cross any land surface within San Juan County, the project would be affected by policies in one of the elements included in the Comprehensive ~~Plan is San Juan County's SMP. This element of the~~Plan—the SMP.~~Comprehensive Plan is part of the~~

~~SMP while the shoreline use regulations that implement the goals and policies of the SMP are contained in San Juan County's Unified Development Code.~~

Shoreline Master Program

San Juan County's SMP was developed to fulfill the requirements of the ~~SMA.~~State of Washington's Shoreline Management Act (SMA). The intent of the SMP is to manage the use and development of the shorelines of San Juan County, giving preference to water-dependent and water-related uses and to encourage that shoreline development and use occurs in harmony with natural conditions (San Juan County~~2000).~~

~~As with~~2002). As in Whatcom County, marine waters within San Juan County are designated shorelines of statewide significance. This designation would apply to the entire portion of the proposed GSX-US pipeline route in San Juan County. ~~San Juan County's policies for managing shorelines of statewide significance include:~~
SMP policies applicable to the GSX-US project that are particularly relevant are summarized below in descending order of preference.

- Recognize and protect the statewide interest over the local interest.
- Preserve the natural character.
- Use in ways that will produce long-term benefits as opposed to short-term benefits or conveniences in accordance with the following:
  - Actions that would commit resources to irreversible uses or would detrimentally alter natural conditions characteristic of such shorelines should be severely limited.
  - The short-term economic gain or convenience associated with a proposed development should be evaluated in relationship to ~~long-term~~long-term and potentially costly impairments to the natural environment.
  - ~~The visual impact of every proposed project should be thoroughly evaluated and adverse impacts should be minimized.~~
- Protect the natural resources and systems. Areas containing unusual or fragile natural resources or systems should be left undeveloped.

~~• Increase public access to publicly owned areas.~~
~~• Increase recreational opportunities for the public.~~

The marine waters of San Juan County are also designated as Aquatic by the county's SMP. The purpose of the Aquatic environment is to protect the quality and quantity of the water, to preserve the water surfaces and foreshores for shoreline dependent uses, such as navigation, commercial fishing, recreation, water-dependent industry, marinas and aquaculture, and to preserve the aquatic area's natural features and resources (San Juan County ~~2000).~~2002). Management polices for the Aquatic environment include:

- Ensure that developments are compatible with the adjoining upland environment.
- Maintain the natural circulation and volume of water to the greatest extent possible.
- Prohibit structures that are not water-dependent.

- Prohibit activities and uses of a permanent nature that will substantially degrade the existing character or habitat value of an area, unless the public interest clearly will be better served by approval of the proposed activity or use.
- Locate and design developments and activities using navigable waters or their beds to minimize interference with surface navigation, to minimize water quality impacts, to minimize adverse visual impacts, and to allow for the safe, unhindered passage of fish and animals.
- Protect fishing and recreational uses of the water, in appropriate areas, against competing uses that would substantially interfere with those activities.
- Encourage the joint use of structures that intrude into aquatic areas, such as docks, piers, jetties, breakwaters and bulkheads, etc., if the development is determined to be appropriate for the site and if adverse cumulative impacts can be mitigated by joint use.
- Prohibit motorized travel in land-based vehicles, provided that such travel should be permitted for official emergency vehicles, for boat launchings, for purposes of undertaking authorized construction and/or repair activities, and for aquaculture when specifically approved.

Aquatic Environment (San Juan County SMP 3.3G). The aquatic environment consists of all waterbodies under the jurisdiction of the SMA and within the boundaries of San Juan County; it includes the water surface, underlying lands, and the water column, including but not limited to bays, straits, harbors, coves, estuaries, tidelands, and lakes. The purpose of the aquatic environment designation is to protect the quality and quantity of the water; to preserve the water surfaces and foreshores for shoreline-dependent uses such as navigation, commercial fishing, recreation, water-dependent industry, marinas, and aquaculture; and to preserve the aquatic area's natural features and resources.

Management policies applicable to the GSX-US project include:

Policy 1. Developments should be compatible with the adjoining upland development.

Policy 2. Maintain the natural circulation and volume of water to the greatest extent possible.

Policy 3. Prohibit structures that are not water-dependent.

Policy 4. Prohibit activities and uses of a permanent nature that will substantially degrade the existing character or habitat value of an area, unless the public interest clearly will be better served by approval of the proposed activity or use.

Policy 5. Locate and design developments and activities using navigable waters or their beds to minimize interference with surface navigation, to minimize water quality impacts, to minimize adverse visual impacts, and to allow for the safe, unhindered passage of fish and animals.

Policy 6. Protect fishing and recreational uses of the water in appropriate areas against competing uses that would substantially interfere with those activities.

Utilities and Capital Facilities (San Juan County SMP 3.5.O). These shoreline use policies apply to services and facilities that produce, transmit, carry, store, process, or dispose of electrical power, communications, oil, and gas.

Management policies applicable to the GSX-US project include:

Policy 2. Locate utilities, capital facilities, and associated rights-of-way outside of the shoreline area to the maximum extent possible, or locate them within existing transportation and utility sites, rights-of-way, and corridors. Joint use of rights-of-way and corridors should be encouraged. When utility lines, connections, and pipes require a shoreline area location, they should be placed underground or located so as to protect scenic views, whenever practicable.

Policy 3. Prohibit utilities and capital facilities in marshes, bogs and swamps, estuaries, critical wildlife areas, or other unique and fragile areas unless no feasible alternative exists (San Juan County 2002).

In its request for Certification of Consistency with the Washington State CZM Program and application for Shoreline Permit to San Juan County (June 2001), GSX-US stated that it would comply with the policies and regulations set forth in the San Juan County SMP.

Unified Development Code

Section 18.30 of the Unified Development Code contains specific regulations to implement the land use policies in the Comprehensive Plan. Two subsections contain regulations applicable to the proposed GSX-US project: 18.30.120 (geologically hazardous areas) and 18.30.160 (fish and wildlife habitat conservation areas).

Geologically Hazardous Areas. Geologically hazardous areas are classified in three categories according to the probability of hazardous geologic activity. Category III relates to seismic hazards and declares that San Juan County in its entirety is located within Seismic Zone 3 in accordance with the Uniform Building Code. Development activities within the zone are required to conform to the applicable provisions of the Uniform Building Code, which contains structural safeguards to reduce the risks from seismic activity.

Fish and Wildlife Habitat Conservation Areas. Applicable to the GSX-US project is Upland Category I for areas that have a primary association with bald eagles, which are protected under the Washington State Bald Eagle Protection Rules (WAC 232–12–292), as well as the federal Bald Eagle Protection Act and Endangered Species Act. Category I habitats must be protected pursuant to the state rules, and a cooperative site management plan must be developed whenever activities that alter habitat are proposed near a verified nest territory or communal roost (San Juan County 2003).

Mitigation Measures

Proposed Action

No additional analysis required.

Terasen Gas Alternative

Permit applications for site acquisition, facility design, construction and operation will be made to the Oil and Gas Commission and the British Columbia Utilities Commission. Local governments will apply conditions of approval through the processes of rezoning, development, and other permits. On similar projects, TGVI has successfully addressed permitting issues and received all required approvals from local governments.

No Action Alternative

Because the new cogeneration facilities would be located at NorskeCanada's existing mill sites, no land use impacts have been identified.

Significant Unavoidable Adverse Impacts

No additional analysis required.

3.7.3 Issue 27: Agricultural Lands

Issue Summary

Description of Problem

The FERC Final EIS does not include a discussion of measures to mitigate the permanent conversion of agricultural land to utility uses, nor does it include discussion of the short-term or long-term impacts on agricultural crops as a result of project construction and operation.

Ecology Requirement

Include a discussion of measures to mitigate the permanent loss of agricultural land, and an analysis of the proposal's impacts on agricultural crops in the environmental review.

Affected Environment

No additional analysis required.

Impacts

Proposed Action

During the construction process, the GSX-US project would temporarily affect approximately 329 acres of agricultural land. Of that total, approximately 14 acres of hay meadow and pasture would be lost for the life of the project (Resource Report 5, pg. 5-8).

In the GSX-Canada project, 28.2 acres of agricultural land would be at least temporarily affected by pipeline construction. No estimate is available for the number of acres of agricultural land that may be permanently lost (GSX-Canada Application, Vol. IV, pg. 7-104).

Terasen Gas Alternative

Information on potential impacts of the Terasen Gas Alternative on agricultural lands is not available.

No Action Alternative

Information on potential impacts of the NorskeCanada proposal on agricultural lands is not available.

Mitigation Measures

Proposed Action

GSX-US would compensate farmers based on fair market value for both temporary and long-term losses of agricultural productivity (Resource Report 5, pg. 5-8). GSX-US would also adopt and implement the mitigation procedures outlined in the FERC Upland Erosion and Control, Revegetation and Maintenance Plan during project construction. GSX-US would salvage, store, protect, and respread topsoil to return agricultural lands to pre-construction productivity. Measures to restore disturbed areas would include relieving compaction, mulching, fertilizing, preparing the seedbed, and revegetation (Resource Report 7, pg. 7-7).

The GSX-Canada pipeline would be aligned where feasible to avoid agricultural lands. On those lands that would be affected, GSX-Canada would ensure a minimum depth of cover of 60 inches; in many cases, the depth of burial would be greater. GSX-Canada would ensure that all equipment is cleaned prior to starting construction in order to minimize the potential to import golden nematodes and noxious weeds (GSX-Canada Application pg. 7-103).

Terasen Gas Alternative

Because the nature and extent of potential impacts of the Terasen Gas Alternative on agricultural lands has not been identified, mitigation measures are not proposed.

No Action Alternative

Because the nature and extent of potential impacts of the NorskeCanada proposal on agricultural lands has not been identified, mitigation measures are not proposed.

Significant Unavoidable Adverse Impacts

With implementation of proposed mitigation measures, significant unavoidable adverse impacts would not be expected.